CLAIMS

1. A therapeutic system for the treatment of tumours comprising a combination of component (i) a radiolabelled antibody and component (ii) a chemotherapeutic agent, wherein the antibody binds selectively to polymorphic epithelial mucin (PEM); the components (i) and (ii) being provided for use in the treatment of a tumour wherein the radiolabelled antibody and a chemotherapeutic agent are administered in combination with one another.

2. A therapeutic system for use as claimed in Claim 1 wherein the antibody treatment precedes treatment with the chemotherapeutic agent.

3. A therapeutic system for use as claimed in Claim 1 wherein the chemotherapeutic agent treatment precedes treatment with the antibody.

4. A therapeutic system as claimed in any of Claims 1 to 3 wherein the antibody is humanised.

5. A therapeutic system as claimed in Claim 4 wherein the antibody is HMFG-1.

6. A therapeutic system as claimed in any preceding claim wherein the chemotherapeutic agent is selected from at least one of docetaxel, paclitaxel, doxorubicin and cisplatin.

7. A therapeutic system for use as claimed in Claim 6 wherein the chemotherapeutic agent is docetaxel.

8. A therapeutic system as claimed in any of claims 1 to 5 wherein the chemotherapeutic agent is selected from at least one of gemcitabine, cyclophosphamide and vincristine.

9. A therapeutic system as claimed in any previous claim wherein the tumour is associated with at least one of the following disorders: breast cancer, ovarian cancer, lung cancer, gastric cancer, bladder cancer and squamous cell carcinoma, such as head and neck cancer.

10. A method of treating a tumour comprising exposing the tumour to a combination of component (i) a radiolabelled antibody and component (ii) a chemotherapeutic agent, wherein the antibody binds selectively to polymorphic epithelial mucin (PEM).

11. A method as claimed in Claim 10 wherein the antibody treatment precedes treatment with the chemotherapeutic agent.

12. A method as claimed in Claim 10 wherein the chemotherapeutic agent treatment precedes treatment with the antibody.

13. A method as claimed in any of Claims 10 to 12 wherein the antibody is humanised.

14. A method as claimed in Claim 13 wherein the antibody is HMFG-1.

15. A method as claimed in any of claims 10 to 14 wherein the chemotherapeutic agent is selected from at least one of docetaxel, paclitaxel, doxorubicin and cisplatin.

16. A method as claimed in Claim 15 wherein the chemotherapeutic agent is docetaxel.

17. A method as claimed in any of claims 10 to 14 wherein the chemotherapeutic agent is selected from at least one of gemcitabine, cyclophosphamide and vincristine.

18. A method as claimed in any of claims 10 to 17 wherein the tumour is associated with at least one of the following disorders: breast cancer, ovarian cancer, lung cancer, gastric cancer, bladder cancer and squamous cell carcinoma, such as head and neck cancer.

19. Use of a combination of component (i) a radiolabelled antibody and component (ii) a chemotherapeutic agent, wherein the antibody binds selectively to polymorphic epithelial mucin (PEM) in the manufacture of a therapeutic system for the treatment of cancer.

20. A use as claimed in Claim 19 wherein the antibody is humanised.

21. A use as claimed in Claim 20 wherein the antibody is HMFG-1.

22. A use as claimed in any of claims 19 to 21 wherein the chemotherapeutic agent is selected from at least one of docetaxel, paclitaxel, doxorubicin and cisplatin.

23. A use as claimed in Claim 22 wherein the chemotherapeutic agent is docetaxel.

24. A use as claimed in any of claims 19 to 21 wherein the chemotherapeutic agent is selected from at least one of gemcitabine, cyclophosphamide and vincristine.

25. A use as claimed in any of claims 19 to 24 wherein the tumour is associated with at least one of the following disorders: breast cancer, ovarian cancer, lung cancer, gastric cancer, bladder cancer and squamous cell carcinoma, such as head and neck cancer.

26. A therapeutic system substantially as described herein with reference to one or more of the examples.

27. A method of treatment substantially as described herein with reference to one or more examples.

28. Use of a combination of component (i) a radiolabelled antibody and component (ii) a chemotherapeutic agent, wherein the antibody binds selectively to polymorphic epithelial mucin (PEM) in the manufacture of a therapeutic system for the treatment of cancer substantially as described herein with reference to one or more examples.